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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/262,362	03/04/1999	DORON KLETTER	105.001:1120	9276

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EXAMINER

WU, JINGGE

ART UNIT PAPER NUMBER

2623

DATE MAILED: 07/01/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/262,362

Applicant(s)

KLETTER ET AL.

Examiner

Jingge Wu

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 15, 18-20, 30-33, 36-38, 43 and 45-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 5, 18-20, 30-33, 36-38, 43, 45-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Art Unit: 2623

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 1935 Comm'r Dec. 11 (1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on May 14, 2003 has been entered.
2. Applicants' preliminary amendment, filed on May 14, 2003 has been entered and made of record. An action on the RCE follows.
3. The rejection to claims 17 and 44 rendered moot by the cancellation of the claims.
4. Applicants' amendment has required new grounds of rejection. New grounds rejection are therefore presented in the Office Action.
5. Applicant's arguments with respect to claims 15, 30, and 36 regarding to Macleod have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 U.S.C. § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Art Unit: 2623

7. Claims 15, 18-20, 30-32, 36-38, 43, and 45-47 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. patent 5778092 to Macleod et al. ("Macleod" a reference of record).

As to claim 15, Macleod discloses a method for reconstruction (decompression) of an image, comprising the steps of:

selecting pixels of the image to be reconstructed from plural planes of data representing the image (Fig. 25a and 25b, col. 14 line 42-col. 15 line 18), wherein said step of selecting comprises selecting pixels of image based on a selector plane (col. 14, lines 53-62) that identifies, for each part of the original image, whether the original image information is maintained in an upper plane or a combination of the upper and at least one lower plane of said plural planes (Fig. 25a, col. 14 lines 45-62, Fig. 25b, col. 15 lines 1-18, note that after decompress upper, lower, and selector planes, the output pixels are selected "using the content of the selector plane to determine the ultimate pixel value between the corresponding pixels in the foreground plane and the background plane" (clearly based on selector plane). In addition, the output pixels also determined "as weighted average of the foreground and background pixel values" (clearly a combination of the upper plane and at least one lower plane).

As to claims 30 and 43, the claims are corresponding apparatus and computer readable media to claim 15. The discussions are addressed with regard to claim 15.

As to claim 18, Macleod further discloses the step of decompressing said plural planes, from a compressed state (col. 14, lines 48-50).

Art Unit: 2623

As to claim 19, Macleod further discloses the selecting step comprising:
combining said upper and lower decompressed planes to produce an additive image (col. 15, lines 1-18); and

selecting pixels of the reconstructed image from corresponding pixel locations of one of said decompressed upper plane and said additive image (col. 15, lines 1-18, col. 14 lines 42-62).

As to claim 20, Macleod further discloses the decompressing step includes the step of, decompressing a selector plane maintaining information identifying which pixels of each other decompressed plane are representative of pixels of the reconstructed image (col. 14 lines 42-63); and

said step of selecting comprises, selecting pixels for the reconstructed image based on the selector plane information (col. 14 lines 42-63).

As to claim 31, Macleod further discloses said selection device is further configured to weight an amount of said result derived from said upper plane based on a predetermined factor (Fig. 25b, col. 15, lines 1-18, col. 22, lines 4-12).

As to claim 32, Macleod further discloses the predetermined factor is a value of a selector plane that identifies how much of said result is derived from each of said upper and lower planes (Fig. 25b, col. 15, lines 1-18, col. 22, lines 4-12).

As to claim 36, Macleod discloses an apparatus for image constructing (decompressing), comprising:

Art Unit: 2623

means for reconstructing an image based on pixels selected from one of at least one of plural planes representing the image (Fig. 25b, col. 14, line 42-col. 15, line 18, col. 4 lines 33-53 note that the means is inherently to conduct the reconstruction (decompression) operation) and an arithmetic operation of pixels from more than one of said plural planes (Fig. 25b, col. 15 lines 1-18).

As to claim 37, Macleod further discloses means for decompressing said plural planes and at least one selection mask (Fig. 22, selector plane) of the image to be reconstructed (col. 14 lines 48-50).

As to claim 38, Macleod further discloses means for reconstruction includes means for selecting pixels based on said at least on selector mask (col. 4 lines 43-53).

As to claims 45-47, the claims are the corresponding computer media and instructions (Fig. 26, col. 15 lines 21-57) claims to claims 17-19. All limitation are addressed with regard to claims 15-19.

Claim Rejections - 35 U.S.C. § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2623

9. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Macleod in view of WO 94/06111 to O'Mahony (a reference of record).

As to claim 33, Macleod does not disclose the value of said selector plane is based on at least one of super-resolution and fine edge detail.

O'Mahony, in an analogous environment, discloses using the value of an alpha mask/plane which is super-resolution (multi-bit, non-binary) selector plane in corresponding locations of the image (Figs. 4, 8 and 10, page 8, second paragraph).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the alpha value based on super-resolution of O'Mahony as value of the selector plane in the method of Macleod in order to achieve better selecting (blending) capability with much less implement cost (O'Mahony, pages 4 and 5, second paragraph). By using the scheme of O'Mahony, the image derived from super-resolution the selector plane would have much more similar appearance to the original image since the alpha value of super-resolution would create more transparent (contrast) level corresponding to the pixels in the foreground and the background planes so that the quality and efficiency of the method is improved.

Contact Information

10. Any inquiry concerning this communication or earlier communications should be directed to Jingge Wu whose telephone number is (703) 308-9588. He can normally be reached Monday

Art Unit: 2623

through Thursday from 8:00 am to 5:30 pm. The examiner can be also reached on second alternate Fridays.

Any inquiry of a general nature or relating to the status of this application should be directed to TC customer service whose telephone number is (703) 306-0377.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amelia Au, can be reached at (703) 308-6604.

The Working Group Fax number is (703) 872-9314.

Jingge Wu

Primary Patent Examiner

Art Unit 2623

June 25, 2003

